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Small and Microthruster Propulsion Research at the Air Force Research Laboratory, Edwards AFB Michael Dulligan, Frank Gulczinski, Greg Spanjers, AFRL, Edwards AFB, CA

Clusters of satellites flying in cooperative formation require small and precise thruster operations to maintain formation integrity. Satellites in the 100-kg size class benefit from small thrusters for primary propulsion and micropropulsion for precision positioning and attitude control. A review of the research and development of small and micropropulsion thrusters at the Air Force Research Laboratory, Edwards AFB is presented with an emphasis on the propulsion package in development for the Air Force Research Laboratory TechSat21 flight in 2003.

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